UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,406	09/15/2003	Deepak Ayyagari	8371-0162	5033

73496 7590 10/14/2008

Stolowitz Ford Cowger LLP/Sharp
621 SW Morrison St
Suite 600
Portland, OR 97205

EXAMINER	
WILSON, ROBERT W	

ART UNIT	PAPER NUMBER
2419	

MAIL DATE	DELIVERY MODE
10/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/663,406	AYYAGARI, DEEPAK	
	Examiner	Art Unit	
	ROBERT W. WILSON	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,5-16,28 and 29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,5-16,28 and 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/10/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 3 & 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raphaeli (U.S. Patent Pub. No.: 2003/0103521) in view of Machin (U.S. Patent Pub. No.: 2002/0032806) which are both IDS documents of record.

Referring to claim 3, Raphaeli teaches: a method of establishing communications in a centralized wire network (Figure 1 performs the method) the method comprising:

Providing a centralized wired network (electrical powerline per Fig 1) characterized by having a single common physical wired connection interconnecting all devices (a, b, c, d, e, and f are devices which are all connected to 14 or wire per Fig 1) currently attached to the network so that all communications among the attached network devices travel directly over the wired connection without traversing a router or switch or wireless link (All communication between a, b, c, d, e, and f are over the powerline and do not traverse a router or switch or wireless link per Fig 1)

Attaching a device to the centralized wired network so that the device is electrically coupled to the common wired connection (A or device per Fig 1 is attached to 14 or wired network so that A or wired device is electrically coupled to the powerline or common wired connection per Fig 1)

Raphaeli does not expressly call for: providing at least one service access point (SAP) in the attached device, each service access point arranged for interfacing with a corresponding specific type of application data; installing a software application in the attached device, the software application arranged to produce a particular type of application data ; and installing a software application in the attached device, the software application arranged to produce a particular type of application data in the attached device, selecting a service access point of the attached device that is specific to the particular type of application data produced by the installed software application; determining that a connection needs to be established in response to receiving a request for a connection from the installed software application in the attached device; generating a connection type and a connection specification if the connection is granted associating a connection identifier with the selected service access point.

Machin teaches providing at least one service access point (SAP) in the attached device, each service access point arranged for interfacing with a corresponding specific type of application data; installing a software application in the attached device, software application arranged to produce a particular type of application data (482 per Fig 19b is the SAP where all of the Fig 19B is the attached device and Application per Fig 19B is the software application. Application is arranged to produce a particular type of application data per Fig 19b)

installing a software application in the attached device, the software application arranged to produce a particular type of application data (Application that is installed in Fig 19B or attached device. Application is arranged to produce a particular type of application data per Fig 19B)

in the attached device, selecting a service access point of the attached device that is specific to the particular type of application data produced by the installed software application (482 per Fig 19B or SAP in the overall 19B or attached device produces a specific application based on installed Application per Fig 19B)

determining that a connection needs to be established in response to receiving a request for a connection from the installed software application in the attached device (Proxy client component receives a request which is represented as a downward arrow for a connection from the Application or software application per Fig 19B)

generating a connection type and a connection specification
if the connection is granted associating a connection identifier with the selected service access point. (based upon the request or down arrow data or voice or connection type as well as PPP, TCP/IP or data specification or inherent voice specification along with a connection identifier is generated per Pg 3 Para [0023] to Para[0027] and Pg 8 Para[0084] [0094])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the providing at least one service access point (SAP) in the attached device, each service access point arranged for interfacing with a corresponding specific type of application data; installing a software application in the attached device, the software application arranged to produce a particular type of application data ; and installing a software application in the attached device, the software application arranged to produce a particular type of application data in the attached device, selecting a service access point of the attached device that is specific to the particular type of application data produced by the installed software application; determining that a connection needs to be established in response to receiving a request for a connection from the installed software application in the attached device; generating a connection type and a connection specification if the connection is granted associating a connection identifier with the selected service access point of Machin to the device of Raphaeli so that the device can send and receive multiple type of protocols and data types without requiring multiple adapters.

Referring to claim 5, the combination of Raphaeli and Machin teach the method of claim 3 and determining that the connection needs to be established Raphaeli teaches wherein the centralized

wired network comprises a powerline (Figure 1 is centralized wire network and powerline per Pg 1 Para[0002])

Raphaeli does not expressly call for: determining that the connection does not exist.

Machin teaches: determining that the connection does not exist (Reference teaches that data is sent when there is a connection identifier per Pg 8 Para [0091] and when there is not a connection identifier then a virtual connection is set up per Pg 10 Para[107] Para[0110])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the determining the connection does not exist of Machin to the system of the combination of Raphaeli and Machin in order build a system which efficiently utilizes the connection identifiers.

Referring to claim 6 the combination of Raphaeli and Machin teach: the method of claim 5 and generating a connection type

Raphaeli does not expressly call for: identifying the associated service access point of the requesting application and generating a connection type based upon the associated service access point of the requesting application

Machin teaches: identifying the associated service access point of the requesting application and generating a connection type based upon the associated service access point of the requesting application (The application per Fig 19B identifies 482 or SAP and generates a connection identifier Per Pg 3 Para [0023] to Para [0027])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the identifying the associated service access point of the requesting application and generating a connection type based upon the associated service access point of the requesting application of Machin to the network of the combination of Raphaeli and Machin in order to build a system in which data is sent to the destination end station.

Referring to claim 7, the combination of Raphaeli and Machin teach: the method of claim 6

Raphaeli does not expressly call for generating a connection type comprising generating a connection type based upon message received form the application requesting traffic flow and wherein the associated service access point is one of an audio –video service access point an internet protocol service access point and an 802.2 packet data service access point.

Machin teaches: generating a connection type comprising generating a connection type based upon message received form the application requesting traffic flow and wherein the associated service access point is one of an audio –video service access point an internet protocol service access point and an 802.2 packet data service access point.(Figure 19B shows setting up a connection type over TCP/IP or internet protocol service access point)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add generating a connection type comprising generating a connection type based upon message received form the application requesting traffic flow and wherein the associated service access point is one of an audio –video service access point an internet protocol service access point and an 802.2 packet data service access point of Machin to the system of the combination of Raphaeli and Machin in order to build a system which does not require multiple adapters in order to send data.

Referring to claim 8, the combination of Raphaeli and Machin teach: the method of claim 5 and requesting a connection:

Raphaeli does not expressly call for: connection selected form the group comprising: continuious grant service, periodic grant service and aperiodic grant service

Machin teaches: aperiodic grant service (connection identifier for period required per Pg 7 Para [0080] to [0082] or aperiodic)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the aperiodic grant service of Machin to the system of the combination of Raphaeli and Machin in order to minimize the number of connection identifiers so a connection identifier is only used for a period and then cancelled and can be reused in order to minimize the number of resources required.

In addition Raphaeli teaches:

Regarding claim 9, wherein requesting a connection selection from the group comprising unicast or multicast or broadcast (Broadcast per Pg 2 Para[0020])

Referring to claim 10, the combination of Raphaeli and Machin teach the method of claim 5 and generating a connection specification.

Raphaeli does not expressly call for: connection specification based upon information within protocols encapsulating application data receive through the service access point.

Machin teaches: connection specification based upon information within the protocol encapsulating application data received through the service access point (The data from the application is encapsulated in PPP or TCP/IP after it is received over 482 or access point per Fig 19B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the connection based upon information within protocols encapsulating application data receive through the service access point of Machin to the system of the combination of Raphaeli and Machin in order to build a system which does not require multiple adapters in order to perform the processing.

Referring to claim 11, the combination of Raphaeli and Machin teach the method of claim 5 and generating a connection specification.

Raphaeli does not expressly call for: generating a connection specification further comprises generating a connection specification based upon a direct specification from the application.

Machin teaches: generating a connection specification further comprises generating a connection specification based upon a direct specification from the application.
(The data from the application is directed PPP or TCP/IP over 482 per Fig 19B)

It would have been obvious to one of ordinary skill in the art at the time of the invention to generating a connection specification further comprises generating a connection specification based upon a direct specification from the application Raphaeli and Machin in order to build a system which does not require multiple adapters in order to perform the processing.

In addition Raphaeli teaches:

Referring to claim 12 the combination of Raphaeli and Machin teach: the method of claim 5 and generating a connection type and Raphaeli teaches connection type from group comprising unicast or multicast or broadcast (Broadcast per Pg 2 Para[0020])

3. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machin

(U.S. Patent Pub. No.: 2002/0032806) in view of Raphaeli (U.S. Patent Pub. No.: 2003/0103521)

which are both IDS documents of record further in view of Johansson (U.S. Patent No.:

6,873,624)

Referring to claim 13, Machin teaches: a method of establishing a multicast connection in a centralized wired communication system (Figure 19B performs the method) the method comprising:

Creating point-to-point connection between a source device and destination device (Pg 14 Para [0158] and connection identifier is set up between the transport interface and destination per Pg 8 Para [0091])

Replicating application data such that the replicate exists for a destination device and transmitting the replicate on the point-to-point connections (Application data encapsulated into a PPP or TCP/IP packet sent on a point to point connection to an end point per Fig 19B or per Pg 14 Para [0158])

Where in each connection is associated with a corresponding service access point of the transport layer of the source device (Each connection is associated with application data through 482 per Fig 19B or SAP where 482 is above TCP/IP and PPP or network and therefore is transport layer of the source device)

Each connection is assigned a connection identifier that is globally unique throughout the centralized network for use in routing data packets from the source device to selected ports in the destination device (connection identifier which inherently is globally unique throughout the network for routing data packets from the source device per Pg 9 Para [0091])

Machin does not expressly call for: replicating data for at least two destination devices

Raphaeli teaches: replicating data for at least two destination devices (Pg 2 Para [0020])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add replicating data for at least two destination devices of Raphaeli to the device of Machin in order to communicate with multiple devices over a powerline infrastructure which can be used to save cost associated with adding wiring instead of utilizing the existing infrastructure wiring.

In addition Machin teaches:

Referring to claim 15 the combination of Machin and Rapheli teach: the method of claim 13 and at least two devices and application data .

Machin does not expressly call for: at least two devices comprises all possible destination devices

Raphaeli teaches: at least two devices comprise all possible destination devices (Figure 1 in which broadcast occurs per Pg 2 Para [0020])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the at least two devices comprise all possible destination devices of Raphaeli to the network of the combination of Machin and Raphaeli in order to broadcast data to all devices on a common wire.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Machin (U.S.

Patent Pub. No.: 2002/0032806) in view of Raphaeli (U.S. Patent Pub. No.: 2003/0103521)

which are both IDS documents of record further in view of Johansson (U.S. Patent No.:

6,873,624)

Referring to claim 14, the combination of Machin and Raphaeli teach the method of claim 13 and at least two devices and broadcasting.

The combination of Machin and Raphael do not expressly call for: less than all possible destination devices

Johannson teaches: less than all possible destination devices (virtual LAN can be created out of an number of devices based upon MAC address or less than the total number of devices per col. 1 lines 24 to 40 and these VLAN can be broadcast via virtual broadcast domain per col. 5 lines 1 to 7)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the less than all possible destination address of Johannson in place of broadcasting to all devices of the combination of Machin and Raphaeli by setting up virtual broadcast VLANs in order to be more selecting in which devices creating less traffic.

5. Claims 16 and 28-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Raphaeli (U.S. Patent Pub. No.: 2003/0103521) which is an IDS document of record in view of

Buckhotz (U.S. Patent No.: 5,555,266) .

Referring to claim 16, Raphaeli teaches: a method of broadcasting a message in a centralized wired power line communication network (One of the devices broadcasts the message over 14 or wired power line communication network per Fig 1) the method comprising:

Providing a centralized wired network (10) characterized by having a single common physical wired connection (14) interconnecting all devices (A, B, C, D, E, and F) attached to the network (10) so that all communication among the attached network devices travel directly over the wired connection (All communication between A, B, C, D, and E travel over 14 per Fig 1)

Bandwidth allocation by a central coordinator attached to the wired network (central control or coordinator allocates access over the wired network per Fig 1 per Pg 2 Para [0017]) the dedicated bandwidth channel defined as a logical channel the common physical wired connection interconnecting all devices attached to the power line communication network (stations contend for channel which is inherently a logical channel on 14 or wired network which is a part of a powerline per Fig 1 and per Pg 2 Para [0017] and Para [0020])

Transmitting a broadcast message on the dedicated broadcast channel of the centralized network so that the broadcast message travels directly over the common physical wired connection from the transmitting device to every other device attached to the centralized network without traversing an intermediary broadcast facility (One of the devices (A through F per Fig 1)

broadcast per Pg 2 Para [0020] over 14 per Fig 1 or common physical wired connection to every other device (any of the devices A through F not transmitting) on the central network (10) without traversing an intermediary broadcast facility)

Raphaeli does not expressly call for: requesting, receiving an indication of bandwidth allocation or transmitting in accordance with received indication.

Buckholz teaches: requesting (request per Col. 1 lines 40 to 46) , receiving an indication of bandwidth allocation (grant channel per col. 1 lines 40-46) or transmitting in accordance with received indication.(commence data transmission per col. 1 lines 40-46)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add requesting, receiving an indication of bandwidth allocation or transmitting in accordance with received indication of Buckholz to the network of Raphaeli in order for the devices to content for a channel and minimize collisions.

In addition Raphaeli teaches:

Regarding claim 28, receiving the broadcast message in the destination device on the centralized network (Pg 2 Para [0020]) and in the destination device sending an acknowledgement message to the transmitting device (Pg 21 Para[0252])

Regarding 29 in the transmitting device receiving acknowledgment message form other devices in the centralized network (Pg 21 Para [0252]) associating the received acknowledgment messages with the broadcast message and determining whether or not to re-try the broadcast message (Pg 21 Para [0252])

Response to Amendment

6. Applicant's arguments with respect to claims 3, 5-16, & 28-29 have been considered but are moot in view of the new ground(s) of rejection.

Refer to the above rejection for details.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT W. WILSON whose telephone number is (571)272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571/272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert W Wilson/
Primary Examiner, Art Unit 2419

RWW